

Lab # 4. Passengers in a Boat

Data:

Measurement	Boat 1	Boat 2	Boat 3	Boat 4	Boat 5
Number of pennies needed to sink boat					
Mass of empty boat					
Mass of boat and pennies					
Volume of boat					
Density of empty boat					
Density of boat with pennies					

Sketch:

Analysis:

1. What is buoyancy and how does it relate to this lab?
2. Does the mass of the boat affect the buoyancy? Why or why not?
3. How are the concepts of buoyancy and density used to design boats that will float on water?

Lab #6. Capillary Action

Data:

Beaker	Observations
1	
2	
3	

Analysis:

1. Is capillary action a cohesive or adhesive force? Explain your answer.
2. Which liquid experienced the greatest capillary action? Explain your answer.
3. How do plants use capillary action to acquire water?